University Service:

Serving on school committees.

Administering theory placement exams (Mannes College and Ball State University).

Dissertation and Masters Thesis reading.

Aural Skills Program Coordinator at Ball State University:

- · overseeing the graduate assistants teaching the courses
- · training them in pedagogical method
- observing their classes and giving teaching critiques
- making their teaching schedules
- scheduling, coordinating and participating in administration of the aural skills final exams.
- revamped the teaching method with greatly improved learning results

Professional Service:

Editorial board of the Journal of Schenkerian Studies (from the journal's inception to the present)

Lectures given for:

Vaughan Williams: 50 Years On Conference at CUNY Graduate Center, Nov. 2008.

Midwest Theory Conference

The first Schenker Conference (at The Mannes College of Music)

The Society for Music Theory

The American Musicological Society

Conference on improvisation at The University of Illinois at Champagne.

David Stern, Ph.D.

Composition • Orchestration • Music Preparation

## David Stern biography

Dr. David Stern was born in Brooklyn, NY, on August 6th, 1955. Dr. Stern is a versatile musician with extensive experience in both classical and popular music genres, he likes to say "I grew up with both Bach and the Beatles." He sang classical music in high school choir while playing guitar in rock bands. Initially he played in bands doing the popular music of the time, and then started writing songs for his final high school band. Early formal studies in composition were in a composition class with Stanley Wolfe at Juilliard. Mr. Wolfe was sufficiently impressed by Stern's composing that he encouraged Stern to study composition privately with him.

David Stern holds a Ph.D. in music theory from the Graduate Center of the City University of New York, and has taught music theory at the Mannes College of Music, Queens College, University of North Texas, and Ball State University, Scripps College and Pomona College, as well as composition at Ball State University. He taught a pop harmony course at The California School of Music. Dr. Stern wrote songs in most popular styles (including rock, pop, gospel, folk, and country) for Hilltop Records. He has also worked as a freelance composer, orchestrator and music copyist in Los Angeles, for a while serving as assistant and music librarian to the famous singer, Miss Peggy Lee.

Work there he met Miss Lee's music librarian, Jonathan Barrick Griffiths, who subsequently hired Dr. Stern to be his music copyist for his arrangements of popular songs. Mr. Griffiths is an arranger to the stars (Michael Jackson, Whitney Houston and Barry Manilow have been among his famous clients). Dr. Stern also did music copying for Terry Woodson, whose company handled the music library of Frank Sinatra and other stars.

Dr. Stern temporarily worked for the Los Angeles Philharmonic assisting the music librarians in music preparation. His Concerto for Clarinet and Orchestra was premiered at the John Anson Ford Theater, Hollywood, by clarinet soloist Leo Chelyapov and the Los Angeles Jewish Symphony on July 11, 2004. An orchestral work written in response to the tragic attack on New York, "We Stand for Freedom: In Memoriam, September 11th, 2001" has already received five performances. Michelle Kinsley of The Star Press wrote the following review of the second performance, done by the Muncie Symphony Orchestra:

"...the pieces written by local composers stole this show ... A very impressive piece of music was performed next. We Stand For Freedom, written by Ball State University music faculty member David Stern, was quite simply music that every American needs to hear. The music, Stern said, was written as a response to 9-11. A lot of ground was covered, from the mournful beginning elegy featuring strings to a triumphant empowering section adding the horns and wind instruments, to the powerful, reaffirming ending that featured what appeared to be every member of the orchestra as well as some perfectly placed fire truck bells (played on the triangle)."

Dr. Stern's choral setting of St. Francis' peace prayer has been performed in various locations including the St. Francis Upper Basilica in Assisi. Two orchestral works on Leonardo da Vinci were premiered by the New Haven Symphony in 2006: the tone poem Da Vinci's Wings of Flight, which is based on Leonardo's fascination with creating human flight centuries ahead of its time, and Da Vinci's Musical Riddle, based on musical

notes from a riddle in one of his notebooks. Dr. Stern's attractive Lyrical Concerto for Soprano Saxophone and Chamber Orchestra has been performed a number of times.

Dr. Stern was hired as an expert musical consultant for the copyright infringement case Ernest Lee Straughter et al v. Usher Raymond et al.

Dr. Stern also worked in the Los Angeles music business doing part preparation on projects for high profile clients such as distinguished film composer Fred Karlin and Joey Melotti (when he was Michael Bolton's music director). More recent professional work has been in preparing scores and parts for string arrangements of pop songs by arranger-songwriter Marco Marinangeli for The X Factor TV show and "America's Got Talent." Dr. Stern also assisted Mr. Marinangeli on projects for Walt Disney. Dr. Stern worked successfully in the studio with Rickey Minor (Jay Leno's band leader) and various X Factor rock producers, helping with recording sessions of string arrangements of pop songs to be used on that TV show; when they wanted different musical solutions he suggested changes on the spot which they liked. Dr. Stern wrote songs in popular styles for artist/singer Sholeh Ashtiani, one of these songs, "Song of Blessings" in Celtic/New Age style was extremely well received and has been released on iTunes.

Dr. Stern wrote, recorded and produced a CD Journey Home with songs in popular genres (featuring pop ballads, folk, folk rock, progressive rock and new age styles). It is released on CD Baby and available for download on iTunes and various other musical websites.

Dr. Stern's music in classical, symphonic, popular, and ambient new age styles can be heard at his website:

www.davidsternmusic.com

# EXHIBIT "B"

#### EXHIBIT B

## Summary on the Musical Aspects of this Report Concerning "Bright Red Chords" and "Domino" by Dr. David Stern, Ph.D. in Music Theory

I was hired by Will Loomis to provide expert analysis of the musical aspect of this case, including examining and providing analysis on the following:

- 1) The melodic correspondence between his song "Bright Red Chords" recorded by his band Loomis and the Lust, and the song "Domino" recorded by Jessie J.
- 2) The relationship between the original demo version of "Bright Red Chords" used for the copyright and the final polished recording for the music video.
- 3) Comparison of the use of drum breaks in both songs at the starts of verses
- 4) The musical relationship between "Bright Red Chords" and the prior song "Rush" by Big Audio Dynamite.

I will give my summary conclusions here, and provide transcripts with detailed discussion and analysis in subsequent exhibits.

## Summary Conclusions

1) Music Correspondences between "Bright Red Chords" and "Domino."

The musical aspect of the case for copyright infringement hangs on the immediately obvious musical similarities between the verses in both songs. On purely musical grounds, most of the verse material in "Domino," bars 4-11, 18-19 and 48-55 corresponds very closely to melodic ideas from the verses of "Bright Red Chords."

There are minor differences between how melodic ideas end in "Bright Red Chords" and "Domino" which constitute slight melodic "variants" rather than being substantial enough to form distinctly different melodies. Any melody can be varied in such a way as to retain its identity, that is common in the "Theme and Variation" genre and in symphonic development. Furthermore, melodic figures from "Domino" that initially had variants appear later in the same or virtually the same form as they originally appear "Bright Red Chords," as I shall show.

Given the broad extent to which the verses of "Domino" use melodic material found in "Bright Red Chords," it is reasonable to conclude on purely musical grounds that the verse melody of "Domino" is largely based on the verse melody of "Bright Red Chords."

2) The relationship between the original demo version of "Bright Red Chords" used for the copyright and the final polished recording for the music video.

The issue of the differences between the copyright demo version of "Bright Red Chords" and the final video version having been raised, I was asked to compare these and render my judgment as to the relationship between these two versions and "Domino."

My findings are that although there are differences between the copyright and the final versions of "Bright Red Chords," the melodic materials that are also found in "Domino" are clearly stated in the original version as well, hence are covered by copyright protection. The differences are in areas that are not connected with the musical aspects of this case.

3) Comparison of the use of drum breaks in both songs at the starts of verses

The initial catchy melodic idea is highlighted in both songs by the absence of steady drums in both songs.

4) The musical relationship between "Bright Red Chords" and the prior song "Rush" by Big Audio Dynamite.

The verse melodies to "Rush" and "Bright Red Chords" start very similarly (although not exactly in the same way) and the standard four-melodic line 8-bar verse has important structural features in common (to be discussed below). So one could say that they are structurally the same type melody, but they also differ in detail.

The opening lines of "Bright Red Chords" and "Domino" start with the same notes (when considered in the same key) and rhythms, which are different from the opening line of Rush, and this proves to be a significant factor when assessing the relationship between the three songs. The main melodic verse material of "Domino" is clearly related to material uniquely found in the catchy opening melodic line of "Bright Red Chords" that never appears in that exact form in "Rush," despite clear similarities between these latter two songs.

The use of melodic ideas in these three songs, their similarities and differences are discussed below with transcriptions and detailed analysis.

# EXHIBIT "C"

#### EXHIBIT C

## Detailed Assessment of the Musical Correspondence between Bright Red Chords and Domino by Dr. David Stern, Ph.D. in Music Theory

Having been hired by Will Loomis to provide expert analysis and opinion as to the musical correspondence between his song "Bright Red Chords" recorded by his band Loomis and the Lust, United States Copyright Office with Registration No. Pau003479101 and the song "Domino" recorded by Jessie J., and released on the Universal label and also on her music video. These are my musical findings:

The musical aspect of the case for copyright infringement hangs on the immediately obvious musical correspondences in melodic figures found in the two compared songs. In order to compare the songs, I did musical transcriptions and analysis which are discussed directly below.

FOR THE FOLLOWING DISCUSSION, PLEASE REFER TO EXHIBIT D

Exhibit D provides comparative transcriptions of the following:

- 1) The original demo version of "Bright Red Chords," which was filed for the song's copyright. This transcription includes melody and the chords for verse 1, chorus, and verse 2
- 2) The final video version of "Bright Red Chords." This includes melody and chords for the intro, verse 1, chorus, and verse 2 and is presented parallel to the original demo version.
- 3) The video version of "Domino," melody and chords for the intro, verse 1, prechorus, chorus, and verse 2. The song has been transposed from its original G major to D major, the key of "Bright Red Chords," for ease of comparison.

NOTE: SINCE THE USE OF COMMON MELODIC ELEMENTS IN THE VERSES OF THESE SONGS IS CENTRAL TO THIS REPORT, THE VERSES FOR ALL OF THE THREE SONG VERSIONS ARE LINED UP FOR EASY COMPARISON IN EXAMPLE 1.

The Copyright Version of Bright Red Chords and the Final Video Version of Bright Red Chords

The issue of the differences between the copyright demo version of "Bright Red Chords" and the final video version of "Bright Red Chords" having been raised, I was asked to compare these and render my opinion as to the relationship between these two versions and "Domino." That is why both versions of Bright Red Chords were included in Exhibit D.

[NOTE: The copyright demo version of Bright Red Chords has only one bar of unaccompanied drum intro as opposed to two bars in the final version, which is why the bar numbers between these two versions ended up being off by one throughout.]

While there are differences between the two versions of "Bright Red Chords," I found that they did not in any way substantively alter this report or my opinion, because the relevant melodic elements of this song that also occur in "Domino" are present in both. These melodic elements are found in what I label melodic figure "A" and the ending of what I call melodic figure "B."

# Correspondence of Ideas in the Verses of Both Songs: Melodic Figure "A"

Please note that in this report I am using pitch names with "Domino" transposed from its original key of G major to D major for easy comparison with "Bright Red Chords."

The main melodic figure labelled "A" in both songs is present fully intact in the demo version of Bright Red Chords (see melodic figures with brackets labelled "A" in Exhibit D):

BRC original: figure A, verse 1 bars 9-10 (Exhibit D p. 2) and 13-14 (Exhibit D p. 3), verse 2 bars 30-31 (Exhibit D p. 11-12), varied in 34-35 (Exhibit D p. 12-13)

BRC final: figure A', verse 1 bars 10-11 (Exhibit D p. 2) and 14-15 (Exhibit D p. 3); verse 2 bars 31-32 (Exhibit D p. 12-13), varied in bars 35-36 (Exhibit D p. 12-13)

Domino: figure A1, verse 1 bars 4-5 (Exhibit D p. 2) and bars 8-9 (Exhibit D p. 3), verse 2 bars 48-49 (Exhibit D p. 11-12) and figure A (virtually same as the original form from BRC) in bars 52-53 (Exhibit D p. 12-13).

Figure A is a catchy and distinctive tune, one can see why it was part of a big hit. The same notes (when considered by scale step or placed within the same key) and essentially the same rhythms are found in all of the songs for the first bar of the figure, with slight variants in the second bar of the figure for the final text word. Note: the fact that "Domino" has a quarter note at the fourth beat of bar 4 (Exhibit D p. 2) and bar 8 (Exhibit D p. 3) where the same note appears as two eighth notes in BRC (see Exhibit D, p. 2, bar 11 of BRC final) is too minor a difference to constitute a real change of melodic identity here, such divisions of a larger note value into shorter repeated notes are standard in theme and variations; the text line in Domino has one less syllable and so uses a quarter note rather than two eighth notes.

I use the marking A' for "Bright Red Chords" final version to indicate a very slight variant of figure A – they are the same notes and rhythms as heard in BRC original version, with just slightly different vocal embellishment on the last note – see the brackets with A' markings on the BRC final staff, Exhibit D, p. 2, p. 3, and pp. 11-12.

The marking A1 is used for "Domino" to indicate a more substantial variant: see the brackets with A1 markings above the Domino staff in Exhibit D, p. 2, p. 3, and pp. 11-12. As mentioned in Exhibit B, there are minor differences between how melodic figures end in "Bright Red Chords" and "Domino" which constitute slight melodic "variants" rather than being substantial enough changes to form distinctly different melodies. In all cases with melodic figure A, it is essentially the same melodic figure with slightly different melodic endings on the final word. The kinds of differences we are talking about here are generally more to do with different embellishments of the same melodic figure rather than truly different melodies.

The most distinctive difference in the use of the A melodic figure between the songs is the use of e1-f#1-a1 (notes are transposed for comparison here) at the very end of the "A" idea in "Domino" (see the "Domino" staff, bars 5, 9, and 49 in Exhibit D, on p. 2, p. 3, and p. 12; these are the last three notes of melodic figure A1). This does not occur in "Bright Red Chords," although the f#1 on the downbeat with the last word of the text line is common to both songs, as is some form of vocal embellishment of going down one step and returning to f#1.

However, in bars 52-53 in the second verse of "Domino" the e1-f#1-a1 ending figure is not there, it just ends on f#1 with a vocal embellishment of moving down a step and back to f#1 (see Exhibit D, p. 12-13). This is the same melodic figure with all the most essential rhythms, scale steps and notes as heard in figure A in "Bright Red Chords," the ending embellishment is simply a vocalist's added nuance. Mr. Loomis embellishes similarly in bar 11 (BRC final version, see Exhibit D, p. 2,), going down a half-step to e#1 and back to the f#1, with slightly different rhythm and pitch, but we are talking about vocalists' nuances, nothing of strongly distinguishing nature with regard to melodic identity. The melody of "Domino" in bars 52-53 (Exhibit D, p. 12-13) is the same melodic figure as figure A of "Bright Red Chords."

# Melodic Correspondence of Ideas in the Verses of Both Songs: role of Phrase "B"

Both songs use a standard grouping of four two-bar melodic figures to form an eight bar unit, which often forms a single verse (although the verses to Domino continue on with additional material).

The verses of "Bright Red Chords" alternate between melodic figure "A" and what I am calling melodic figure B", although "B" is varied in the course of this song. These variations, and the discrepancies between the early copyright version and the final video version have no bearing on the materials common to both this song and to "Domino," for the only part of melodic figure B that carries over into "Domino" is its ending with the melodic motion from the tonic to the sixth and fifth scale degrees. In the final version of "Bright Red Chords," bar 13 (Exhibit D, p. 3) and bar 34 (Exhibit D, p. 12) the last word of the text line has a two-note figure b-a, while these same two notes are also followed by two additional notes in bar 17 (Exhibit D, p. 4) and in bar 38 (Exhibit D, p. 13). These additional notes were not in the original copyright version, which simply has the two

notes b-a at the corresponding points at the ends of verses 1 and 2, the BRC original version bar 16 (Exhibit D, p. 4) and bar 37 (Exhibit D, p. 13).

While the second and fourth text lines for the verses for "Bright Red Chords" have the contrasting melodic figure that I am labeling "B," both verses of "Domino" use figure A for all of its initial four text lines for verses 1 and 2, but its second and fourth text lines have a different ending musically related to the ending of figure B from "Bright Red Chords."

Thus the basic outlines of the two verses of "Bright Red Chords" and the initial 8-bar verse units for verses 1-2 of "Domino" can be represented as follows:

BRC copyright demo: A-B-A-B verse 1, bars 9-16 (see Exhibit D, pp. 2-4), verse 2 in bars 30-37 (B is fragmentary in bars 36-37; see Exhibit D, pp. 11-13).

BRC final: A-B-A-B verse 1, bars 10-17 (see Exhibit D, pp. 2-4), verse 2 in bars 31-38 (see Exhibit D, pp. 11-13).

Domino: A-start of A with ending of B-A-start of A with ending of B, verse 1 bars 4-11, (see Exhibit D, pp. 2-4), verse 2, bars 48-55 (see Exhibit D, pp. 11-13).

The A and B symbols represent material common to both songs, but as my analysis makes clear, there are various embellishments and variants found along the way. However, this representation of the verse structure is useful in that it shows how the material is distributed, and it gives a good overview of the relationship of all of the melodic material of the initial 8-bar verse units of "Domino" to the 8-bar melodic verse material of "Bright Red Chords."

The ending of melodic figure B is varied in "Domino" at bars 7, 11, 51 and 55 (see the "end of B varied" brackets above the "Domino" staff in Exhibit D, p. 3, p. 4, p. 12 and p. 13). However, just as we saw that the ending of melodic figure A was varied and then appeared in essentially the same form as heard in "Bright Red Chords," what I am calling "end of B" also occurs in the same form as heard in "Bright Red Chords:" compare BRC final version's ending of figure B in bars 13 and 34 (Exhibit D, p. 3 and p. 12) and "Domino," bar 19 (see Exhibit D, p. 6); this use of the "start of A with ending of B" occurs after the initial 8-bar verse unit, at the end of the continuation of verse 1.

It is interesting in understanding the connections between the two songs to again note that while both figures A and the ending of B occur initially with variants in "Domino," that both of these elements later appear in that song in essentially the same form (without the variants) as originally found in "Bright Red Chords."

NOTE: In the case of Domino, "melodic figure B" is not used as a whole figure in itself. I am using the labels "end of B varied" and "figure B" in "Domino" to point out the use of material musically related to verse material from melodic figure B of "Bright Red Chords." It is musically very significant that the second and fourth text lines of each

verse ends with the note succession d 1-b-a, with the note "a" arriving on the second eighth note of the bar, that is part of the structural similarity between the two songs (with the 2nd and 4th two-bar melodic groups of both songs both arriving on the fifth scale degree on the second eighth note preceded by the first and sixth scale degrees). This contributes to the similarity in sound between the two songs, especially in the places where "Bright Red Chords" verse lines ends on this note a (see bars 13 and 34 of BRC final version in Exhibit D, p. 3 and p. 12); the effect is not as close between the songs where BRC final version adds two additional notes to the ending of figure B in bars 17 and 38, see Exhibit D, p. 4 and p. 13), but the b-a notes are there in the same locations as the first two eighth notes as they are in bars 13 and 34 of the BRC final version.

Were most of the melodic verse material in "Domino" distinctly different from that of "Bright Red Chords," then these uses of the melodic "end of B" figures in "Domino" by themselves would be insufficient to establish a strong melodic connection between the two songs. However, since melodic figure A is used so extensively in "Domino" and since these figure B endings occur in corresponding places in the verses for both songs, the "end of B" melodic figures in "Domino" strengthen the musical connection between the two songs.

To summarize, all of the material for the first 8-bar units for both verses of "Domino" consists almost entirely of material found in the 8-bar verse units of "Bright Red Chords," with some variant figures or vocal embellishments. The continuation of the first verse of "Domino" contains divergent melodic material starting with the pickup to bar 13 (see Exhibit D, p. 4, starting with "I can taste..."). This verse continuation then returns to the formula "start of A-ending of B" in bars 18-19 (see Exhibit D, p. 5-6), which is another instance of the use of melodic elements found in "Bright Red Chords."

# Melodic Correspondence of Ideas in the Verses of Both Songs: Summation

Exhibit E lines up uses of melodic figures A and B in both early and final versions of "Bright Red Chords" and "Domino" for easy comparison.

Example 2a on p. 1 of Exhibit E shows the use of melodic figure "A" in both songs.

Example 2b on p. 2 of Exhibit E gives melodic figures A and B from "Bright Red Chords" for reference, then shows the use in "Domino" of the "start of A-ending of B" melodic pattern used for the second and fourth text lines in both verses, as well as the additional instance of this pattern at the end of the continuation of verse 1 (bars 18-19, where the "end of B" is used without any substantial variation).

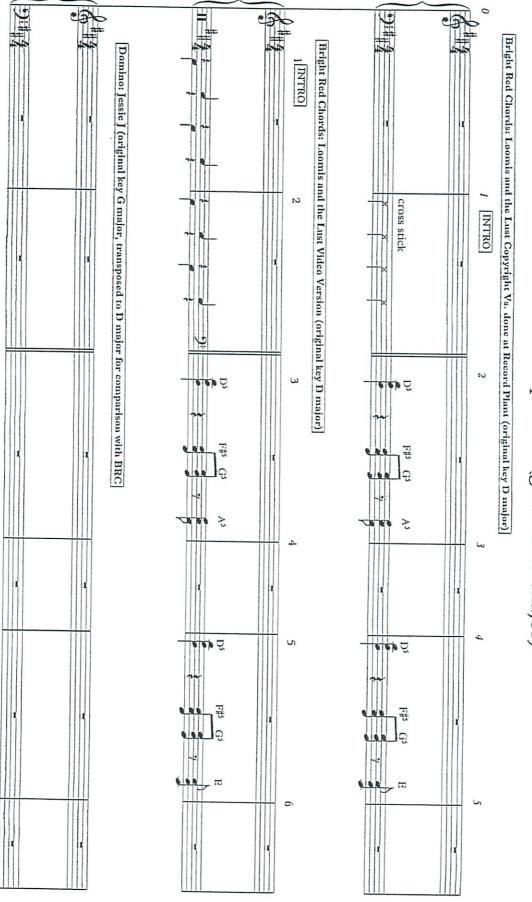
# Conclusion on the Use of Figures A and B in Domino

Given the broad extent to which the verses of "Domino" use melodic material found in "Bright Red Chords," it is reasonable to conclude on purely musical grounds that the verse melody of "Domino" is largely based on the verse melody of "Bright Red Chords." It is my opinion that these similarities form the basis of my conclusion that "Domino" is

substantially similar to both the copyrighted version of "Bright Red Chords" and to the release-version of "Bright Red Chords" on Loomis and the Lusts' video and on their CD release of "Bright Red Chords."

# EXHIBIT "D"

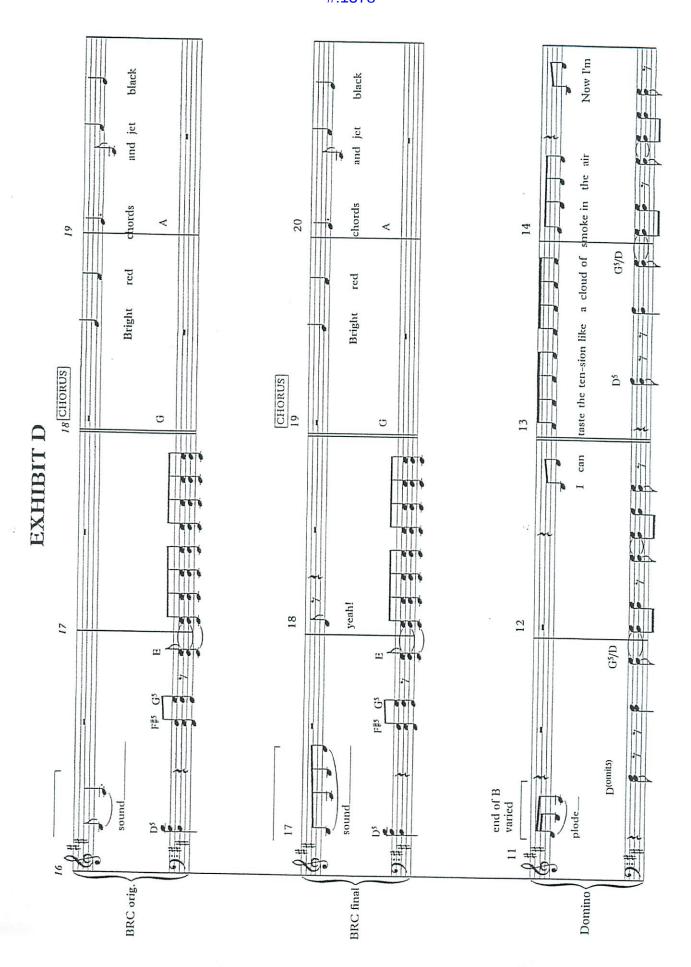
# Bright Red Chords - (Copyright Demo Recording and Final Video Versions) -Domino Comparison (given in D major)





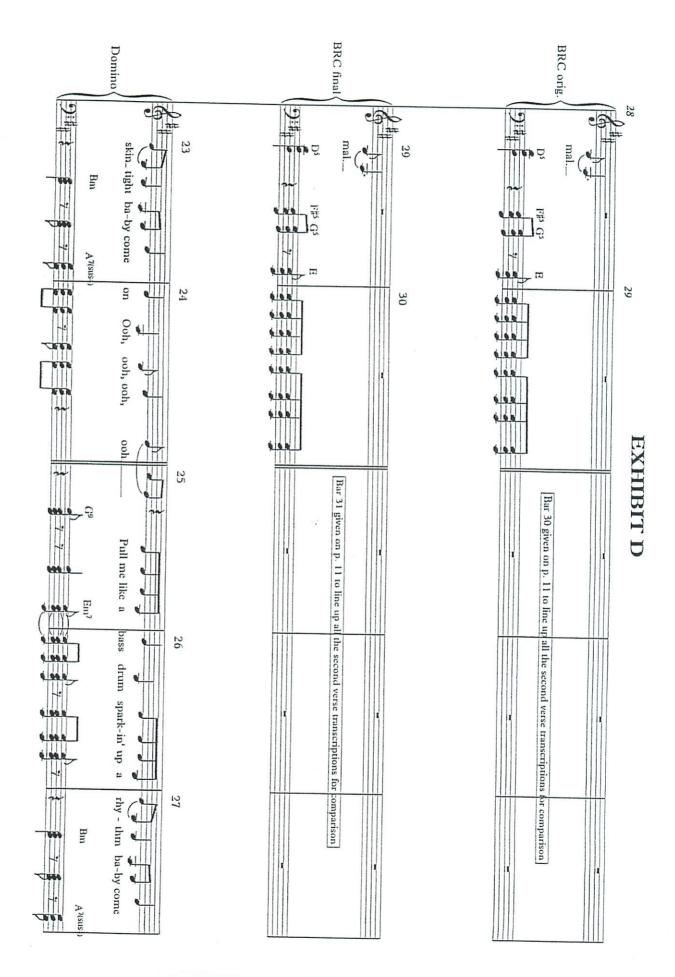


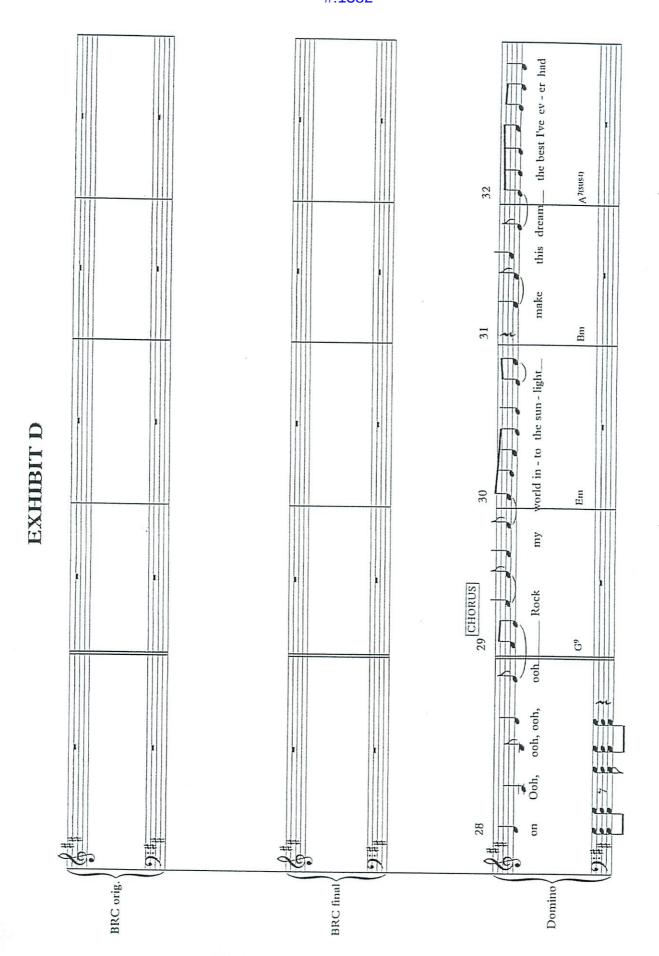
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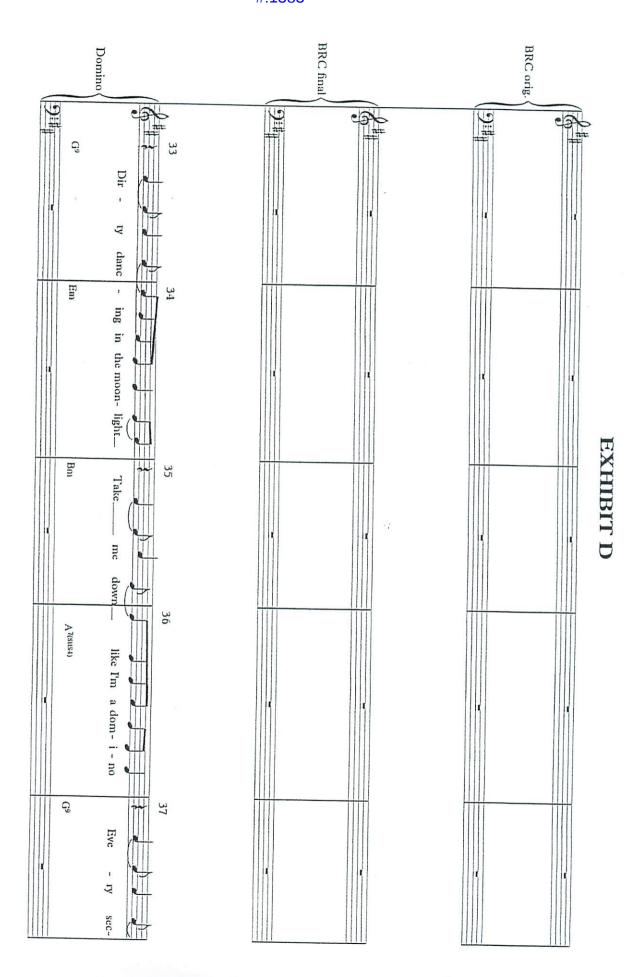


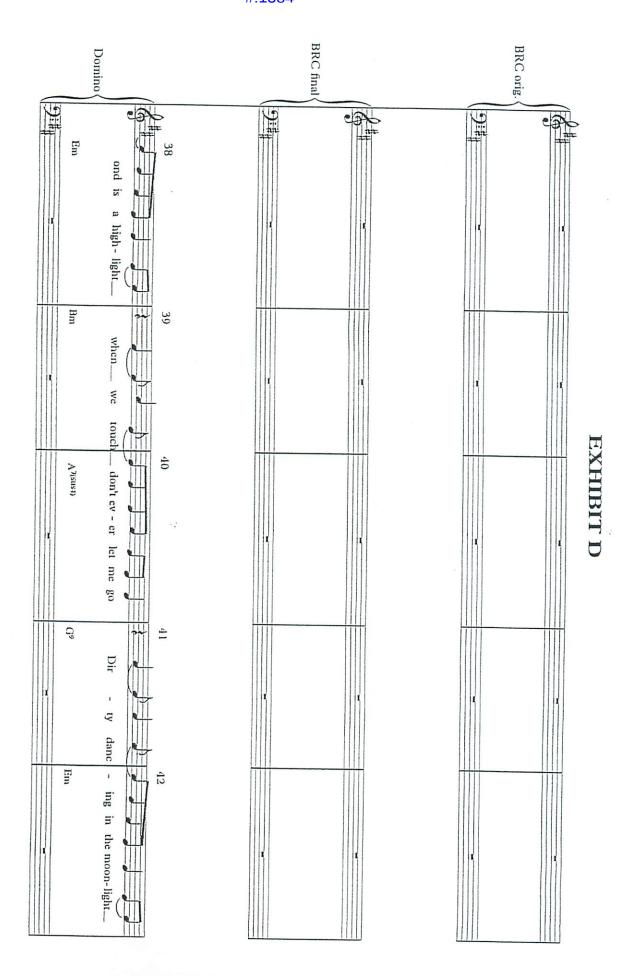












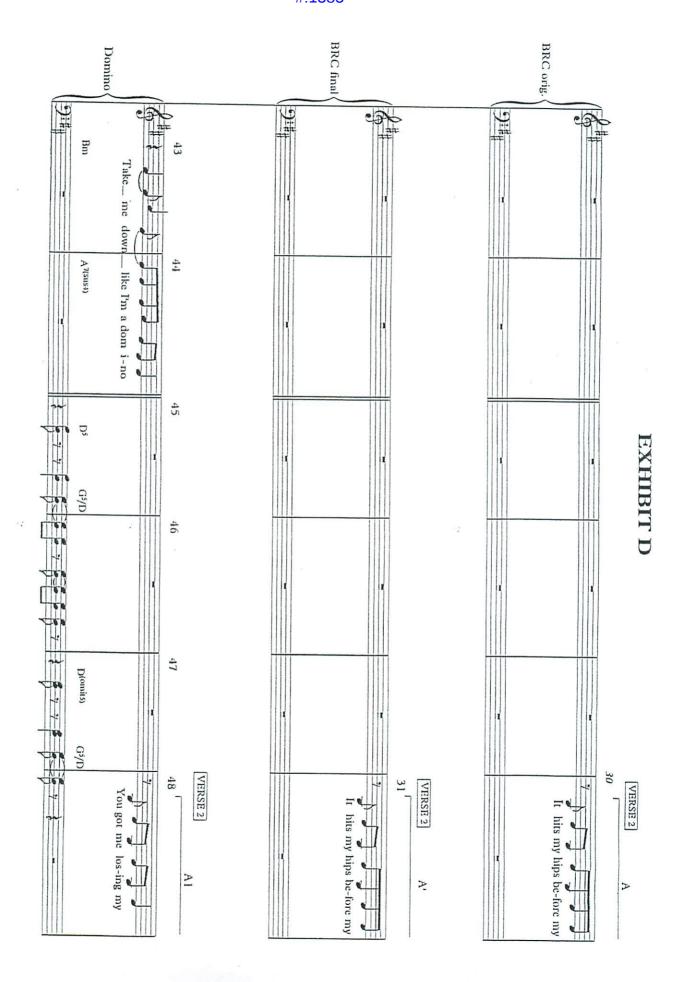




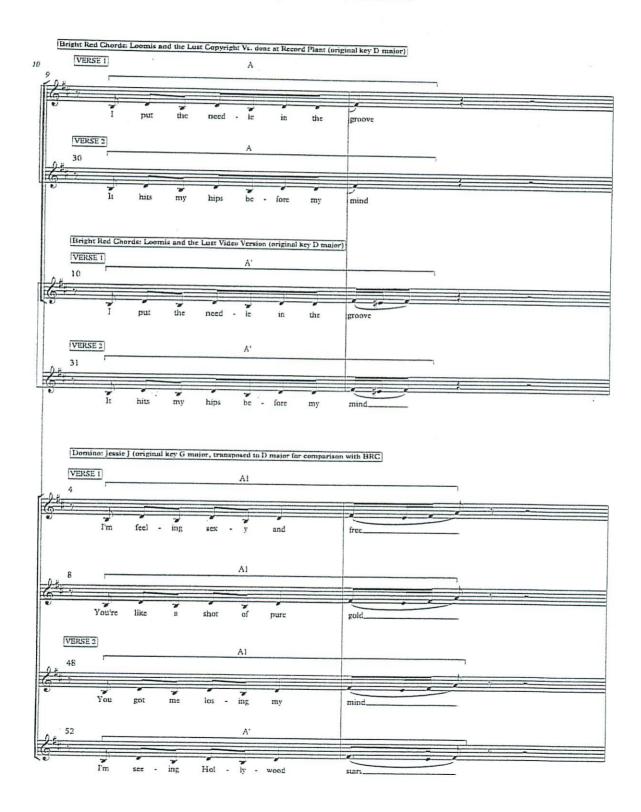


EXHIBIT "E"

#### EXHIBIT E

Bright Red Chords (Demo and Final Versions) and Domino Comparative Uses of Melodic Figures A and B

Example 1: Uses of Melodic Figure A in Bright Red Chords and Domino



#### EXHIBIT E

# Example 2: Uses of Melodic Figures A and B in Bright Red Chords and Domino

2

Instead of using a distinct melodic idea B as in Bright Red Chords, Domino uses the start of melodic figure A followed by an ending figure that matches the end of figure B, or (usually) one that is very similar (labeled "end of B varied").

